WHAT IS CLAIMED IS:

1. An information processing apparatus comprising:

a class classifier for classifying an aimed-at data item into one of a plurality of classes specified in advance, according to a plurality of data items disposed around the aimed-at data item;

a memory for storing conversion information for the aimed-at data item for each class; and

a converter for converting the aimed-at data item to a data item having a higher quality, according to the conversion information,

wherein the class classifier classifies the aimed-at data item into a different class according to whether the aimed-at data item is missing.

2. An information processing apparatus according to Claim 1, wherein the conversion information is information used for generating the aimed-at data item according to the plurality of data items disposed around the aimed-at data item, for a missing class in which the aimed-at data item is missing, and the conversion information is information used for converting the aimed-at data item to a data item having a higher quality, for a non-missing class in which the aimed-at data item is not missing.

- 3. An information processing apparatus according to Claim 2, wherein the conversion information is information used for converting the aimed-at data item to a data item having reduced noise, for the non-missing class.
- 4. An information processing apparatus according to Claim 1, wherein the conversion information is information obtained by learning achieved in advance.
- 5. An information processing apparatus according to Claim 1, wherein the conversion information is prediction coefficients used for a linear or non-linear, or a first-order or high-order estimation equation.
- 6. An information processing apparatus according to Claim 1, wherein the class classifier classifies the aimedat data item into one of the plurality of classes specified in advance, according to a class tap which includes the plurality of data items disposed around the aimed-at data item.
- 7. An information processing apparatus according to Claim 1, wherein the converter converts the aimed-at data item to a data item having a higher quality, according to a

prediction tap corresponding to the class into which the aimed-at data item has been classified.

- 8. An information processing apparatus according to Claim 1, wherein the class classifier classifies the aimedat data item into one of the plurality of classes specified in advance, according to a plurality of data items disposed spatially around the aimed-at data item.
- 9. An information processing apparatus according to Claim 1, wherein the class classifier classifies the aimedat data item into one of the plurality of classes specified in advance, according to a plurality of data items disposed along the time axis around the aimed-at data item.
- 10. An information processing apparatus according to Claim 1, wherein the aimed-at data item is image data.
- 11. An information processing method comprising the steps of:

classifying an aimed-at data item into one of a plurality of classes specified in advance, according to a plurality of data items disposed around the aimed-at data item;

selecting conversion information corresponding to the

class into which the aimed-at data item has been classified; and

converting the aimed-at data item to a data item having a higher quality, according to the conversion information,

wherein the aimed-at data item is classified into a different class according to whether the aimed-at data item is missing, in the step of classifying the aimed-at data item.

- 12. An information processing method according to Claim 11, wherein the conversion information is information used for generating the aimed-at data item according to the plurality of data items disposed around the aimed-at data item, for a missing class in which the aimed-at data item is missing, and the conversion information is information used for converting the aimed-at data item to a data item having a higher quality, for a non-missing class in which the aimed-at data item is not missing.
- 13. An information processing method according to Claim 12, wherein the conversion information is information used for converting the aimed-at data item to a data item having reduced noise, for the non-missing class.
 - 14. An information processing method according to

Claim 11, wherein the conversion information is information obtained by learning achieved in advance.

- 15. An information processing method according to Claim 11, wherein the conversion information is prediction coefficients used for a linear or non-linear, or a first-order or high-order estimation equation.
- 16. An information processing method according to Claim 11, wherein the aimed-at data item is classified into one of the plurality of classes specified in advance, according to a class tap which includes the plurality of data items disposed around the aimed-at data item, in the step of classifying the aimed-at data item.
- 17. An information processing method according to Claim 11, wherein the aimed-at data item is converted to a data item having a higher quality in the step of converting the aimed-at data item, according to a prediction tap corresponding to the class into which the aimed-at data item has been classified.
- 18. An information processing method according to Claim 11, wherein the aimed-at data item is classified into one of the plurality of classes specified in advance in the

step of classifying the aimed-at data item, according to a plurality of data items disposed spatially around the aimed-at data item.

- 19. An information processing method according to Claim 11, wherein the aimed-at data item is classified into one of the plurality of classes specified in advance in the step of classifying the aimed-at data item, according to a plurality of data items disposed along the time axis around the aimed-at data item.
- 20. An information processing method according to Claim 11, wherein the aimed-at data item is image data.
- 21. A recording medium storing a computer-readable program, the program comprising the steps of:

classifying an aimed-at data item into one of a plurality of classes specified in advance, according to a plurality of data items disposed around the aimed-at data item;

selecting conversion information corresponding to the class into which the aimed-at data item has been classified; and

converting the aimed-at data item to a data item having a higher quality, according to the conversion information,

wherein the aimed-at data item is classified into a different class according to whether the aimed-at data item is missing, in the step of classifying the aimed-at data item.

22. A learning apparatus comprising:

a class classifier for classifying an aimed-at data item into one of a plurality of classes specified in advance, according to a plurality of data items disposed around the aimed-at data item; and

a conversion-information generator for generating conversion information used for converting the aimed-at data item to a data item having a higher quality, for the class,

wherein the class classifier classifies the aimed-at data item into a different class according to whether the aimed-at data item is missing.

23. A learning method comprising the steps of:
classifying an aimed-at data item into one of a
plurality of classes specified in advance, according to a
plurality of data items disposed around the aimed-at data
item; and

generating conversion information used for converting the aimed-at data item to a data item having a higher quality, for the class,

wherein the aimed-at data item is classified into a different class in the step of classifying the aimed-at data item, according to whether the aimed-at data item is missing.

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